[0061] Focal Group Placement

[0062] In the embodiments of the present invention so far described, the focal group has generally been placed in the center of the view. In yet another aspect of the present invention, the focal point may be shifted from the center of the view to one side of the view. Generally, the focal group will be placed so that the maximum number of icons (both focal group icons and non-focal group icons) will be visible to the user. The focal group may be placed in the center of the dynamic timeline view when certain conditions are met. For example, the focal group may be in the center of the view if the number of icons on each side of the focal group is the same or at least meets a minimum threshold, e.g., if the number of icons on both sides of the focal group are of such an amount that they extend beyond the visible area in the dynamic timeline view. In yet another embodiment, the focal group may be centered when all of the icons on either side of the focal group are of an amount that can be displayed such that they can all be seen within the visible area in the view.

[0063] **FIG. 11** illustrates a scenario where, according to aspects of the present invention, the focal group might not remain centered in the dynamic timeline view. A focal point **1100** is located on a timeline **1101**. The timeline **1101** has a starting point **1108** and an ending point **1111**. The timeline **1101** also has a visible area **1106**. The visible area **1106** is the area that will be displayed to the user in enough detail for the user to discern the timeline content. The timeline **1101** is further divided into a Side A **1102** and a Side B **1104** on the left and right sides of the focal point **1100**, respectively. In this example, the number of icons on Side A is greater than the number of icons on Side B and these icons extend beyond the start of the visible area **1110**. Thus, certain icons on Side A are not visible to the user. However, side B contains fewer icons, and as a result, the end of the timeline **1112** falls within the visible area. In order to provide the user with a view of the greatest total number of icons, the focal point may shift to the user's right in the view. The actual ordering interval captured by the focal point does not change. This shifting procedure changes only the location of the focal point **1100** in the dynamic timeline view.

[0064] Non-Focal Groups

[0065] According to other aspects of the present invention, when a group is not at the focal point (i.e. is not the focal group), it is a non-focal group. Generally, a non-focal group will have certain properties associated with it. For example, in an embodiment where the view is presented with a 3D effect, the non-focal groups will be presented in such a way as to highlight the three dimensions.

[0066] Referring back to **FIG. 6**, the focal group **509** may be placed in the front and center of the GUI view, and may appear to be some distance from the user. Non-focal groups **610***a*, **610***b*, **610***c*, and **610***d* may be positioned at some horizontal and spatial (in 3D implementations) offset from the focal group and also appear to be less prominent than the focal group. For example, they may be positioned behind the focal group (i.e. somewhat farther in the distance). In order to better simulate a 3D effect, the items in the focal group **509** may cast simulated shadows on the non-focal groups immediately adjacent. Likewise, each non-focal group may cast simulated shadows on elements situated behind it. In one embodiment of the present invention, all of the groups (non-focal and focal) may be aligned vertically. In other words, each of the groups appears to be placed at the same vertical position on the display, regardless of the conceptual camera's present perspective. In other embodiments of the present invention, the non-focal groups may be offset vertically from the focal group and the other non-focal groups. In certain embodiments the non-focal groups may be in focus, allowing the user to more easily select a new focal group from among the non-focal groups in the view. However, as the non-focal groups are set farther and farther away from the focal group **509**, the non-focal groups may become blurred, fogged or transparent. If the number of intervals between a non-focal group and the focal group becomes large, the non-focal group might not be displayed, or it may simply become too small for the user to see on the screen.

[0067] Referring again to **FIG. 6**, four non-focal groups may be observed—two on each side of focal group **509**. It may be observed that the top portion of each group is in alignment with the others. Each non-focal group is divided into columns, and may be sorted by the ordering attribute specified for the view. There are two non-focal groups **610***a* and **610***b* that are located one interval from the focal group **509**. In an embodiment in which the view is a dynamic timeline view, these non-focal groups contain icons that are the closest in time to the focal group **509**. Columns that are further in time from the focal group **509** are placed further away from the focal group both horizontally and spatially (in 3D implementations) so that they appear to be further away in space. Each of the non-focal groups has a non-focal group header (**608***a* and **608***b* respectively) that provides information of the group's contents in a manner similar to the focal group header **602** discussed above. Just as the focal group header **602** may be the perceived width of the focal group, the non-focal group header may be the perceived width of the non-focal group.

[0068] In some embodiments of the present invention, the non-focal group icons **606***b* (those in the non-focal groups) may be presented as partially obscured by those items in columns closer to the focal group **509**. Each column of non-focal group icons **606***b* may be partially obscured by the column immediately adjacent and closer to or in the focal group **509**. For example, column **620** is partially obscured by column **618**. In other embodiments all icons may be fully displayed.

[0069] In yet another aspect of the present invention, a non-focal group may be called out without making it the focal group. Referring to **FIGS. 12***a* and **12***b*, a dynamic timeline view according to aspects of the present invention is shown. In **FIG. 12***a*, the focal group **1209** is the month of April. The non-focal groups **1202** are partially obscured according to aspects of the present invention. If the user wishes to more closely examine the contents of the February non-focal group **1204** without changing the focal group **1209**, a mouse pointer **1202** may be moved over the February non-focal group **1204** and left to hover. **FIG. 12***b* demonstrates how after a certain period of time of mouse hover, the February non-focal group **1204** may fold out from the other non-focal groups, displaying its icons in their entirety rather than partially obscured as may be the norm.

[0070] Histogram

[0071] In further aspects of the present invention, a histogram may be provided to allow the user to more easily